


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2009- 0050</p> <p>Date: 05 March 2009</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>	
<p>Type Approval Holder's Name :</p> <p>DASSAULT AVIATION</p>	<p>Type/Model designation(s) :</p> <p>FALCON 2000 and 2000EX aeroplanes</p>
<p>TCDS Number : EASA.A.008</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : This directive supersedes AD 2008-0178 dated 24 September 2008</p>	
ATA 32	Main Landing Gear - Shock Absorber Restrictor - Inspection / Repair / Modification
Manufacturer(s):	DASSAULT AVIATION
Applicability:	Model Falcon 2000 and Falcon 2000EX aeroplanes (versions F2000DX and F2000EX EASy inclusive), all serial numbers.
Reason:	<p>During the overhaul of a Main Landing Gear (MLG) of a Falcon 2000, the sleeve on the hydraulic flow restrictor in the shock absorber was found displaced, because of the rupture of its three retaining screws. In this situation, the energy dissipation function of the shock absorber is lost and high loads may be transmitted to the aircraft structure during landing. Structural integrity may thus not be guaranteed over the entire certified landing conditions domain particularly in combination of high landing weight and high vertical speed.</p> <p>Failure of the retaining screws has been determined to be the final phase of a slow unscrewing process under normal operational conditions. The unsafe condition only exists once the three screws have failed.</p> <p>For the reasons described above, Airworthiness Directive (AD) 2008-0178 had been released to require a repetitive borescope inspection of the flow restriction system and, if necessary, repair of the shock absorber per Dassault Aviation Service Bulletins (SB) F2000-367 and F2000EX-185 (corresponding to modification M3120) developed with the landing gear manufacturer's instructions. It has also mandated the update of the operator's maintenance programme to include a revision of the "Check after Hard Landing" maintenance procedure (MP) calling for borescope inspection.</p>

	<p>After qualification testing, modification M3120 has been approved by EASA as a definitive solution.</p> <p>As a consequence, the present AD retains the requirements of AD 2008-0178 which is superseded and introduces M3120 as a terminating action to the repetitive inspections requirement, and further mandates its embodiment no later than the next MLG shock absorber overhaul.</p>
Effective Date:	19 March 2009
Required action(s) and Compliance Time(s):	<p>Required as indicated, unless previously accomplished:</p> <p>PREVIOUS REQUIREMENTS OF AD 2008-0178</p> <p>(1) Within 3 months after 08 October 2008 (the effective date of AD 2008-0178), update the operator's approved aircraft maintenance programme to incorporate the applicable version of MP32-000 at revision date 06/2008 or later.</p> <p>(2) <u>For MLG shock absorber with 4 200 Landings (LDG) or more, since new or since last overhaul on 08 October 2008 (the effective date of AD 2008-0178):</u></p> <p>Within 8 months after the effective date of AD 2008-0178, inspect the shock absorber per the accomplishment instructions of SB F2000-366 or F2000EX-167, as applicable to aircraft model.</p> <p>If any damage is found, within the applicable time(s) or LDG limits specified in the relevant SB F2000-366 or F2000EX-167, repair the shock absorber per the accomplishment instructions of SB F2000-367 or F2000EX-185, as applicable to aircraft model.</p> <p>(3) <u>For MLG shock absorber with 1 900 LDG or more, since new or since last overhaul on 08 October 2008 (the effective date of AD 2008-0178) and installed on airplanes that have performed 6 Steep-approach landings or more, over the last 6 months before 08 October 2008:</u></p> <p>Within 8 months after the effective date of AD 2008-0178, inspect the shock absorber per the accomplishment instructions of SB F2000-366 or F2000EX-167, as applicable to aircraft model.</p> <p>If any damage is found, within the applicable time(s) or LDG limits specified in the relevant SB F2000-366 or F2000EX-167, repair the shock absorber per the accomplishment instructions of SB F2000-367 or F2000EX-185, as applicable to aircraft model.</p> <p>NOTE: Steep Approach Standard Operating Procedures (SOPs) are found and defined in the Airplane Flight Manual (AFM) Appendices as listed in the Reference Publications.</p> <p>(4) <u>For MLG shock absorber with 1 900 LDG or more, since new or since last overhaul on 08 October 2008 (the effective date of AD 2008-0178) and installed on airplanes that have performed 5 Steep-approach landings or less, over the last 6 months before 08 October 2008:</u></p> <p>Within 18 months after the effective date of AD 2008-0178, or before accumulation of 5 000 LDG since new or last overhaul for the MLG shock absorber, whichever occurs first, inspect the shock absorber per the accomplishment instructions of SB F2000-366 or F2000EX-167, as applicable to aircraft model.</p> <p>If any damage is found, within the applicable time(s) or LDG limits specified in the relevant SB F2000-366 or F2000EX-167, repair the shock absorber per the accomplishment instructions of SB F2000-367 or</p>

	<p>F2000EX-185, as applicable to aircraft model.</p> <p>(5) <u>For MLG shock absorber with less than 1 900 LDG since new or since last overhaul on 08 October 2008 (the effective date of AD 2008-0178):</u></p> <p>Before accumulation of 3 000 LDG since new or last overhaul, inspect the shock absorber per the accomplishment instructions of SB F2000-366 or F2000EX-167, as applicable to aircraft model.</p> <p>If any damage is found, within the applicable time(s) or LDG limits specified in the relevant SB F2000-366 or F2000EX-167, repair the shock absorber per the accomplishment instructions of SB F2000-367 or F2000EX-185, as applicable to aircraft model.</p> <p>(6) Embodiment of SB F2000-367 or F2000EX-185 without previous implementation of SB F2000-366 or F2000EX-167, as applicable to aircraft model, is acceptable to comply with the requirements of paragraphs (2), (3), (4), and (5) of this AD.</p> <p>NEW REQUIREMENTS INTRODUCED BY THIS AD</p> <p>(7) After accomplishment of paragraphs (2), (3), (4), (5) of this AD, repeat thereafter at intervals not to exceed 1 900 LDG the shock absorber inspections and associated corrective actions per the accomplishment instructions of SB F2000-366 or F2000EX-167, as applicable to aircraft model.</p> <p>(8) Before accumulating 6 000 landings or 12 years, since new or since last overhaul, whichever occurs first, and unless previously accomplished, install or modify the LH and RH shock absorbers with P/N suffix as listed in table 1, and embodying M3120.</p> <table><tr><th colspan="3">Table 1. New Part Numbers after modification of shock absorbers per M3120</th></tr><tr><th>Post M3120</th><th>on F2000 airplanes</th><th>on F2000EX airplanes</th></tr><tr><td>LH MLG Shock Absorber</td><td>D23365000-4</td><td>D23745000-2</td></tr><tr><td>RH MLG Shock Absorber</td><td>D23366000-4</td><td>D23746000-2</td></tr></table> <p>Note: M3120 can be complied with:</p> <ul style="list-style-type: none">* As per new production* As per Messier Dowty SB D23345-32-019 or D23733-32-004* As per DA SB F2000-367 & F2000EX-185 <p>(9) The modification leading to new Part Numbers as indicated in Table 1 terminates the repetitive inspection requirements of paragraph (7) of this AD.</p> <p>(10) From 08 October 2008, do not install on any airplane, a MLG shock absorber, as a replacement part, which does not have the appropriate part number suffix (e.g. -4..) as given in the above Table 1, as applicable to aircraft model.</p>	Table 1. New Part Numbers after modification of shock absorbers per M3120			Post M3120	on F2000 airplanes	on F2000EX airplanes	LH MLG Shock Absorber	D23365000-4	D23745000-2	RH MLG Shock Absorber	D23366000-4	D23746000-2
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Ref. Publications:	<ul style="list-style-type: none">- Dassault Aviation SB F2000-366 initial issue- Dassault Aviation SB F2000EX-167 initial issue- Dassault Aviation SB F2000-367 initial issue- Dassault Aviation SB F2000EX-185 initial issue												

	<ul style="list-style-type: none"> - Messier-Dowty SB D23345-32-019 initial issue - Messier-Dowty SB D23733-32-004 initial issue <p>The use of later approved revisions of these Service Bulletins is acceptable for compliance with the requirements of this AD.</p> <ul style="list-style-type: none"> - Dassault Aviation MP 32-000 Rev. Date 06/2008, as published through the applicable Aircraft Maintenance Manual Temporary Revision (TR): <ul style="list-style-type: none"> o Falcon 2000 TR 112 o Falcon 2000EX TR 53 o Falcon 2000EXEasy TR 65 o F2000DX TR 6 - F2000 AFM DTM537 revision 10, Annex 3 or 3A - F2000EX AFM DGT84278 revision 06, Annex 7A or 7C - F2000EX "EASy" AFM DGT88898 revision 05, Annex 7 or 7A - F2000 "DX" AFM DGT88898 SUP05 revision 2, Annex 7 or 7A
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 17 December 2008 as PAD 08-142 for consultation until 14 January 2009. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical contents of requirements in this AD, please contact your Dassault Falcon Technical Assistance: <ul style="list-style-type: none"> • For Europe, Middle East and Africa based operators: <p style="margin-left: 40px;">Hot Line: (33) 1 47 11 37 37 / Fax: (33) 1 47 11 89 49</p> • For USA, Canada and Mexico based operators: <p style="margin-left: 40px;">Help Desk: (1) 800-2FALCON (2325266) / Fax: (1) 201 541 4740</p> • All other areas: <p style="margin-left: 40px;">Help Desk: (1) 201 541 4747 / Fax: (1) 201 541 4740</p>